Date: Thu, 18 Feb 93 04:30:03 PST
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #44
To: packet-radio

Packet-Radio Digest Thu, 18 Feb 93 Volume 93 : Issue 44

Today's Topics:

4800 baud HAPN modems.
advice on backbones wanted
AMIPAC
AX.25 in C (2 msgs)
ICOM IC-37A and Clegg FM-21 at 9600 baud
Looking for MSYS BBS/packet software
Packet/Internet connections
PK232 resistor mod
ROSE
Software over Packet
TCP/IP book for packet? (2 msgs)
wireless lan products

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 17 Feb 93 17:08:55 GMT
From: news-mail-gateway@ucsd.edu
Subject: 4800 baud HAPN modems.
To: packet-radio@ucsd.edu

Does anyone know where I can pick up some 4800 baud HAPN modems? Also, I think that I read somewhere that some radios would run 4800b with no modifications. Is that a true statement? If so, anyone have any experiences with running unmodified radios at 4800b? Thanks.

73's de Jack

| (817) 962-4409 | VM Office Systems | 5 West Kirkwood Blvd | MS 06-05-60 |
| T/L 522-4409 | Performance Group | Westlake, Tx 76299 | Rm. 6569 |
vnet:jgrass@dalhqic2 ibmmail:usib34cd@ibmmail internet:kf5mg@vnet.ibm.com

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Date: 17 Feb 93 15:23:51 GMT
From: news-mail-gateway@ucsd.edu
Subject: advice on backbones wanted
To: packet-radio@ucsd.edu

> >to me that I've read on this newsgroup that in other parts of the country
> >people are upgrading thier 9600 baud backbones with 56k or 112k baud systems.
>   ^^^^
>
> Would someone care to elaborate the 112Kbps system.
> Is it done using the DSY modem?
> Would it be possible to the get the mods of
> the DSY to run at 112Kbps (if at all possible).
> Would PI-card handle the 112Kbps speed?
> Thank you.

I have had a couple of DSY modems running back-to-back on the bench at 125Kbps (125 because that's what you get with a 8MHz crystal in the baud rate generator, and such crystals are easy to come by). The mods required can be easily extrapolated from the info in the DSY docs, with two exceptions:

1) The standard 555 timer chip used as the VCO in the clock recovery PLL won't work reliably above 100KHz. It should be replaced with a CMOS TLC555, which has better specs.

2) Although the 3-stage LC filter used in the 455KHz IF can be stagger-tuned to provide something approximating the 150KHz or so bandwidth needed for the 125Kbps MSK signal, the resulting eye pattern is not very satisfactory. I designed a replacement filter with quasi-linear phase response, but didn't finish debugging it... one of these days I'll get back to it.

> 73 Onno YC1DAV/VE3
>   yc1dav@ve3.yc1dav.ampr.org [44.135.84.22]

Barry VE3JF

--
Barry McLarnon | Internet: barry@dgbt.doc.ca
Communications Research Center | AMPRnet: barry@bbs.ve3jf.ampr.org
Ottawa, Canada K2H 8S2 | PBBSnet: ve3jf@ve3jf.#eon.on.can

Date: Wed, 17 Feb 1993 14:08:44 GMT
From: unogate!news.service.uci.edu!usc!howland.reston.ans.net!wupost!emory!sol.ctr.columbia.edu!ira.uka.de!math.fu-berlin.de!news.netmbx.de!Germany.EU.net!mcsun!news.funet.fi!@mvb.saic.com
Subject: AMIPAC
To: packet-radio@ucsd.edu

HI OM!

Here are two addresses to get AmiPac:

programmer Silvano Funghi IW0BRH
via Cola di Rienzo
00047 Marino Laziale
ITALY

tel: 06 9386 320
" AMIPAC is a SHAREWARE program so if you like it, and want to use it, you should send, say $25 to Silvano"

and you can ask here

Peter Havlykke OZ4ACF@OZ6BBS.DNK.EU
Espeg{rdsvej 22 B
DK-2880 Bagsvaerd

tel: (+45) 44 98 37 22

The newest version which I've heard is v6.32.

73 de Petri OH1MVH@OH1RBU.FIN.EU

Date: Wed, 17 Feb 1993 20:29:14 GMT
From: news.cerf.net!pagesat!netsys!agate!howland.reston.ans.net!ux1.cso.uiuc.edu!news.cso.uiuc.edu!uxa.cso.uiuc.edu!btbg1194@network.UCSD.EDU

Subject: AX.25 in C
To: packet-radio@ucsd.edu

In article <9302152201.AA18168@sir.ifi.unibas.ch> balmer@ifi.unibas.CH (Marc Balmer) writes:
>Dear netters,
>
>do you know where I can find the AX.25 protocol in the C
>language?
>
>Thanks for your help,
>Marc Balmer, HB9SSB
>

get a hold of the source code to Andy Payne's (n8kei) Poor Man's Packet
software tnc. it is very well written and the AX.25 stuff (both level 1
and level 2?) is well modularized and separated out.
The code is available on the network (try "archie -c pmpsrc").
(and it is restricted for use in non-commercial, amateur radio applications)

KB8CNE, Brad Banko

--
Brad Banko; Dept of Physics; U of Illinois; b-banko@uiuc.edu
==
Wow! 256 color Windows!   73 de kb8cne @ n9lnq.il

Date: Tue, 16 Feb 1993 19:33:29 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpfcso!hplvec!
tcline@network.UCSD.EDU
Subject: AX.25 in C
To: packet-radio@ucsd.edu

> In rec.radio.amateur.packet, balmer@ifi.unibas.CH (Marc Balmer) writes:
>
>   Dear netters,
>
>   do you know where I can find the AX.25 protocol in the C
>   language?
>
>   Thanks for your help,
>   Marc Balmer, HB9SSB

Would Poor Man's Packet C source count?:

1. For PC-compatibles:
    - A. Poor Man's Packet: (the authors are on internet)
        - I. Page 8 August 1991 73 magazine.
        - II. Anonymous FTP: helios.tn.cornell.edu (128.84.241.2), /pub/PMP/pmp11dsk.zip .

73

Ted Cline, N0RQV
ted_cline@hpisla.lvld.hp.com
tcline@hpislx.lvld.hp.com
VOICE: (303) 679-2352
FAX: (303) 679-5971

VXI Systems Division
Hewlett-Packard, M/S CU-326
815 14th Street SW
P.O. Box 301
Loveland, CO 80537 USA

Date: Wed, 17 Feb 93 20:44:05 PST
From: sdd.hp.com!portal!cup.portal.com!jkesling@network.UCSD.EDU
Subject: ICOM IC-37A and Clegg FM-21 at 9600 baud
To: packet-radio@ucsd.edu

Is anyone out there using the ICOM IC-37A or the Clegg FM-21 at 9600 baud?

I'm helping a friend get these rigs working at 9600 baud and it isn't going a smoothly as I had hoped. I think we have the Clegg working at least we have a good eye pattern on the service monitor.

The ICOM is another story. The most convinent place to inject the TX audio was at pin 7 of IC7 which resulted in a garbage eye pattern. I wanted to inject it at the junction of R98 and C118 but that point is almost impossible to get to.

The service monitor belongs to a third gentleman and we don't want to wear out our welcome so any information anyone has that might help would be appreciated. I would also be interested in hearing about any experiences with either of these rigs at 9600 baud, positive or negative.

I will post the results of our effort here for all to enjoy.....

I can be reached at:
jkesling@cup.portal.com
jkesling@utcam.cse.utoledo.edu

or packet at:
wa8zgo@n8kyd.oh.usa.na

Thanks and 73's
John - WA8ZGO

Date: 17 Feb 93 20:56:38 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!gatech!concert!duke!news.duke.edu!ee.egr.duke.edu!jbs@network.UCSD.EDU
Subject: Looking for MSYS BBS/packet software
To: packet-radio@ucsd.edu

I'm trying to get a copy of MSYS, a BBS and TCP/IP node software package. I have it on good authority that it's freeware or shareware, and that a copy resides on the Cleveland Hamnet phone BBS. Unfortunately, I have always gotten busy signals at both phone numbers I was given for that BBS. Can anyone tell me from where I might be able to FTP a copy of this software?

Thanks in advance..

-joe, KD4LLV
--

You spend the night
Like you were spending a dime

- Lyle Lovett

Date: Thu, 18 Feb 1993 10:57:46 GMT
From: usc!howland.reston.ans.net!spool.mu.edu!caen!sol.ctr.columbia.edu!ira.uka.de!fauern!lrz-muenchen.de!cd1!t2372ca@network.UCSD.EDU
Subject: Packet/Internet connections
To: packet-radio@ucsd.edu

palefox@hardy.u.washington.edu (Dagmar Pepping) writes:

>Is there a way for me to send mail via the Internet to someone in Germany
>who doesn't have Internet access, but has packet radio? How would this
>work, and how would he reply to me?

I don't know, if it's possible, but it's illegal in Germany, because the BBS (or Digipeaters) are forwarding messages of non-Hams, and only the contact between licensed people is allowed !
I believe that there are not gateways between PR and Intrenet in Germany -
I've heard that's not forbidden concretely, but not legal either - the next on is (was ?) in HB9

Martin
DL3RDR@DB0LAN.DEU.EU

Date: 17 Feb 93 23:34:02 GMT
From: sun-barr!olivea!isc-br!tau-ceti!comtch!iea!FredGate@ames.arpa
Subject: PK232 resistor mod
To: packet-radio@ucsd.edu

Yes the mod affects the HF Packet. It is a tightning of the low-pass filter of the PK232 to optimize for AMTOR. It also of course then helps for RTTY and for CW but at the loss of PACKET on HF. It doesn't affect the VHF performance of the PK232.

You could use different values and optimize for RTTY. Perhaps someone can think of a way to switch it (the mod) in and out. A easier way to change the PK232 performance is to outboard a "old" TU (terminal unit) and just use the Aux modem port and add a front panel switch. This is what we have done with a number of them here in the Northwest. We found a bunch of old dovetron's for $50 each pulled from some government service. And use them doing regeneration on RTTY.

73, Jay Ws7i

 * Origin: Think Tank II BBS * Spokane, WA (509) 244-6446 (1:346/8)

Date: 18 Feb 1993 07:11:40 GMT
From: usc!howland.reston.ans.net!spool.mu.edu!caen!saimiri.primate.wisc.edu!
usenet.coe.montana.edu!news.u.washington.edu!stein.u.washington.edu!
dbillon@network.UCSD.EDU
Subject: ROSE
To: packet-radio@ucsd.edu

In France some people developped a protocol similar to "rose" and claim that it is a very good one. Does anyone use this protocol in the US ? Your opinion ?

I am also looking for the specifications of this protocol for packet radio.

Please use my E-MAIL address for your answers.

73, Damien, N7/FC1PLI, dbillon@u.washington.edu.

Date: 17 Feb 93 14:13:58 GMT
From: ogicse!emory!wa4mei!ke4zv!gary@network.UCSD.EDU
Subject: Software over Packet
To: packet-radio@ucsd.edu

In article <2B81E661.25378@news.service.uci.edu> eahu099@orion.oac.uci.edu (Asako Mariather Kurosaka-Black) writes:

> I am curious why people do not send binaries (software) over the packet bulletin system. It seems to be successful over internet (comp.binaries...), but I have not noticed it on packet. I would guess the main reasons to be:
>
> 1) TOO MUCH DATA FOR SUCH A SLOW MEDIUM. I would assume this is the primary reason, but if people used small programs, maybe 3-4K, it wouldn't be any different than a message.

A pair of programs called "chunk" and "glue" are available that will break a file into <5k messages to be sent over the system and "glue" them back together at the other end. It may take a week for all the chunks to traverse a state though, and sometimes a chunk is lost.

> 2) PEOPLE DON'T KNOW HOW. Maybe, But UUDECODE is a good standard to use, and you could use the COMT version on the PC which would allow you to send the UUDECODE.COM file in the message. (2K)

We were using BtoA and AtoB, but uuencode and uudecode work fine too.

> 3) NO COMMON DESTINATION. True, but I would be willing to bet that there are more PC clones out there on packet than any others. Plus you could send code for any machine format.

Yeah, just mark machine type in the Subject line of the chunks.

> 4) WOULDN'T INTEREST EVERYONE. No article out there now interests everyone.

Yep.

>What are some other reasons for not using packet for such a distribution?

We've been doing it for years. At first we were exchanging compressed binaries directly, then we decided to take advantage of the BBS network. We compress the file, usually with PKzip, then BtoA it or uuencode it, then run it through chunk and send it out as a series of <5k messages. At the receiving end we put it back together with glue, AtoB or uudecode it, and decompress it.

Works fine. We had some problems at first with the BBS sysops who wanted to know why we were sending "encrypted" traffic, but once they understood there weren't any problems. Of course now we are back to just ftping the files via the TCP/IP network, but sending files via the BBS net was a nice hack for a while.

There are some downsides. The BBS net isn't too robust and chunks can be lost. This makes the entire set of files useless. The BBS net also doesn't enforce horizons very well and old chunks can float around forever clogging up the net. The system is also horribly slow and requires some operator knowledge and software. It was useful, though, when it was all there was. Now with a sturdy TCP/IP network in the tri-state area, ftp is a better solution.

Gary

```
--
Gary Coffman KE4ZV          |    You make it,     | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems |    we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way             |    Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244     |                     |
```

Date: Wed, 17 Feb 1993 00:04:59 +0000
From: pipex!demon!wise.demon.co.uk!simon@uunet.uu.net
Subject: TCP/IP book for packet?
To: packet-radio@ucsd.edu

In article <18b2127f@nacjack.gen.nz> richard@nacjack.gen.nz writes:

>
>That book mentioned here about TCP/IP under packet (350+ pages)?
>
>I checked my local bookstore's CD, and the ISBN isn't listed, and neither
>is the publisher. Does anyone have any more info?
>
>Hex
>

The book you want is "NOSintro - TCP/IP over packet radio" by Ian Wade G3NRW
ISBN 0-897649-00-2 ... Publisher is DOWERMAIN LTD,
7 Daubeney Close,
Harlington,
Dunstable,
Bedfordshire LU5 6NF
U.K.

Regards Simon

--

```
+-------------------+-----------------------------------------------------+
| G1FHY             | AMPR.NET - g1fhy@hub.g1fhy.ampr.org [44.131.7.128]|
| Simon Wise        | NTS.BBS  - g1fhy@gb7hsn.#32.gbr.eu                  |
| 51 Hamilton Road | INTERNET - simon@wise.demon.co.uk                   |
| West Norwood      | BT NET   - 44-81-766-0120                           |
| London SE27 9RZ  |                                                     |
+-------------------+-----------------------------------------------------+
```

Date: 17 Feb 1993 15:03:33 GMT
From: dog.ee.lbl.gov!hellgate.utah.edu!cs.utexas.edu!tamsun.tamu.edu!cs.tamu.edu!kurt@network.UCSD.EDU
Subject: TCP/IP book for packet?
To: packet-radio@ucsd.edu

In article <729907499snz@wise.demon.co.uk>, simon@wise.demon.co.uk (Simon Wise) writes:

```
|> In article <18b2127f@nacjack.gen.nz> richard@nacjack.gen.nz writes:
|>
|> >
|> >That book mentioned here about TCP/IP under packet (350+ pages)?
|> >
|> >I checked my local bookstore's CD, and the ISBN isn't listed, and neither
|> >is the publisher. Does anyone have any more info?
|> >
|> >Hex
|> >
|> The book you want is "NOSintro - TCP/IP over packet radio" by Ian Wade G3NRW
|> ISBN 0-897649-00-2 ... Publisher is DOWERMAIN LTD,
|>                                     7 Daubeney Close,
|>                                     Harlington,
|>                                     Dunstable,
|>                                     Bedfordshire LU5 6NF
|>                                     U.K.
|>
```

Hmmm, maybe we could get a bulk order done?

--

Kurt Freiberger, wb5bbw   kurt@cs.tamu.edu   409/847-8607 fax:409/847-8578
Dept. of Computer Science, Texas A&M University   DoD #264: BMW R80/7 pilot
"We preserve our freedom using three boxes: ballot, jury, and cartridge."
      *** Not an official document of Texas A&M University ***

Date: 17 Feb 1993 19:19:29 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!agate!darkstar.UCSC.EDU!cats.ucsc.edu!matthew@network.UCSD.EDU
Subject: wireless lan products
To: packet-radio@ucsd.edu

The latest Black Box catalog lists the BestLAN wireless LAN card.
Specs are: 902-928 MHz spread-spectrum, Po= 250mW, 2 megabits/sec
on your choice of an ISA or MC bus card. Claims to work up to 800ft
with supplied omni antenna (assuming no obstructions and no interference,
presumably) or up to 5 miles with a directional gain antenna.
Comes with a Novell NDIS driver. Retail price from Black Box is $799/each.
I know about the theory of operation, etc. Here's the questions:

- Is there a Packet Driver available for this card?

- Has anyone actually tried this card? What sort of real-world throughput can be expected?

- Is this card available from anywhere else, cheaper?

- Are there any competitive products I should consider?

intended application is LOW COST (under $1000), short-range (0.5 - 3.0 miles)
outdoor point-to-point links in a relatively low ambient RF environment,
to provide TCP/IP connectivity between various open-access machines in our
community.
(to provide higer speed and lower monthly cost than 14.4kbps dialup SLIP
connections for those links that would be short enough to apply this solution)

post or mail replies (followup to comp.dcom.lans.misc)

-matthew kaufman
matthew@cats.ucsc.edu

End of Packet-Radio Digest V93 #44
****